

REMARKS

The applicant traverses the section 102 and section 103 rejections. The rejections are based upon United States Patent No. 1,421,232 to Hinzke.

The present invention is directed to a concentric hopper and burn chamber comprising a burn chamber in which to combust sulphur. The burn chamber comprises one or more sidewalls, a base, a lid and a gas outlet. The hopper holds sulphur to be combusted. The hopper comprises one or more sidewalls, a base and a lid. The sulphur hopper substantially surrounds the burn chamber.

Unlike the present invention, the Hinzke reference teaches a hollow column. The hollow column is formed by arranging cylindrical section 18 and 19 one upon the other in an alternating sequence. Hinzke, page 1, lines 105-108. Unlike the present invention, sulphur is not combusted in the hollow column.

Surrounding each section 18 is a circular, outwardly extending tray 21. Surrounding each section 19 is a circular, outwardly extending tray 24. Hinzke, page 2 lines 5-22. The trays surround the hollow column. Above the trays is melting kettle 28 (hopper) into which sulphur is placed. Additional sulphur is inserted through side door frames 7 and ignited. The sulphur in kettle 48 melts and runs in a "serpentine course" over trays 24 and 21 downward until it "falls upon the brick lining 5 of the bottom of the burner body or shell...." Hinzke, page 2, line 107 to page 3, line 25. Unlike the present invention, the burner of Hinzke surrounds the inner, hollow column and shares such surrounding chamber with hopper kettle 48. No prior art of record, including Hinzke, teaches a burn chamber and hopper configuration in which the hopper substantially surrounds the burn chamber as claimed. Therefore, claims 1-10 are allowable.

Furthermore, claims 4-10 are also independently allowable. The claimed means for substantially eliminating any discharge plume and corresponding housing adjacent the burn chamber are not taught by the prior art of record. An embodiment of the claimed means is illustrated in as housing 310 in Figure 6. Unlike the present invention, the annular region of Hinzke relied upon in the Office Action is the burn chamber.

Claims 1-10 are in condition for allowance. The applicant requests allowance of claims 1-10. Should the Examiner have any questions, please contact the undersigned attorney.

Dated this 28<sup>th</sup> day of September, 2007.

KIRTON & McCONKIE

By: s/Todd E. Zenger/  
Todd E. Zenger  
Attorney for Applicant  
Registration No. 33,610

KIRTON & McCONKIE  
1800 Eagle Gate Tower  
60 East South Temple  
Salt Lake City, Utah 84111  
Phone: (801) 328-3600  
Fax: (801) 321-4893  
CUSTOMER NO: 21999